

WHAT IS CLAIMED IS:

1. A pneumatic tire having a rubber component where the rubber in said component is comprised of

5 (A) from 10 to 75 phr of a rubber gel selected from the group consisting of polybutadiene gel, styrene butadiene gel and natural rubber gel, acrylonitrile-butadiene gel, polychloroprene gel and mixtures thereof;

(B) from 1 to 25 phr of syndiotactic 1,2-polybutadiene; and

(C) a rubber containing olefinic unsaturation.

10 2. The pneumatic tire of claim 1 wherein said syndiotactic 1,2-polybutadiene is a highly dispersed blend with a rubber and contains from 5 weight percent to about 40 weight percent syndiotactic 1,2-polybutadiene.

15 3. The pneumatic tire of claim 1 wherein said rubber gel is polybutadiene gel.

20 4. The pneumatic tire of claim 1 wherein said rubber gel is a styrene butadiene gel.

5. The pneumatic tire of claim 4 wherein said rubber gel is grafted with a polar unsaturated monomer.

25 6. The pneumatic tire of claim 1 wherein said polar unsaturated monomer is selected from the group consisting of acrylic acid, methacrylic acid, acrylamide, methacrylamide, N-methoxymethyl methacrylic acid amide, N-acetoxymethyl methacrylic acid amide, acrylonitrile, dimethyl acrylamide, hydroxyethyl acrylate, hydroxyethyl methacrylate, hydroxypropyl acrylate, hydroxypropyl methacrylate, hydroxybutyl acrylate, hydroxybutyl methacrylate.

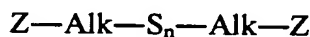
30 7. The pneumatic tire of claim 5 wherein from 1 to 20 weight percent of said rubber gel is derived from said polar unsaturated monomer.

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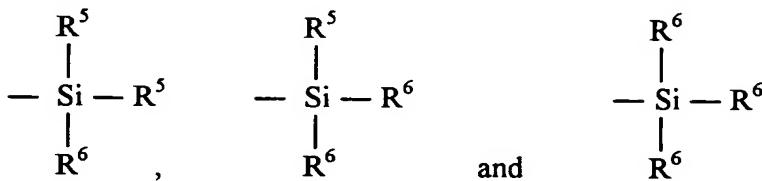
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8. The pneumatic tire of claim 1 wherein said rubber is selected from the group consisting of natural rubber, neoprene, polyisoprene, butyl rubber, halobutyl rubber, polybutadiene, styrene butadiene copolymer, styrene/isoprene/butadiene rubber, methyl methacrylate-butadiene copolymer, isoprene-styrene copolymer, methyl methacrylate-isoprene copolymer, acrylonitrile-isoprene copolymer, acrylonitrile-butadiene copolymer, carboxylated rubber, EPDM, silicon-coupled star-branched polymers, tin-coupled star-branched polymers and mixtures thereof.

9. The pneumatic tire of claim 1 wherein from 0.5 to 20 phr of a sulfur containing organosilicon compound is present and is of the formula:



in which Z is selected from the group consisting of



where R^5 is an alkyl group of 1 to 4 carbon atoms, cyclohexyl or phenyl; R^6 is alkoxy of 1 to 8 carbon atoms, or cycloalkoxy of 5 to 8 carbon atoms; Alk is a divalent hydrocarbon of 1 to 18 carbon atoms and n is an integer of 2 to 8.

10. The pneumatic tire of claim 1 wherein said composition is thermomechanically mixed at a rubber temperature in a range of from 140°C to 190°C for a total mixing time of from 1 to 20 minutes.

11. The pneumatic tire of claim 1 wherein said tire is selected from the group consisting of passenger tires, motorcycle tires, aircraft tires, agricultural, earthmover, off-the-road and truck tires.

12. A pneumatic tire of claim 1 wherein said rubber component is selected

from the group consisting of a tread cap, tread base, sidewall, apex, chafer, sidewall insert, innerliner, wirecoat and ply coat.

13. The pneumatic tire of claim 1 wherein said rubber gel has a particle
5 diameter of from 20 to 1,000 nm.

14. The pneumatic tire of claim 1 wherein said rubber gel has a swelling
index (Qi) in toluene of from 1 to 15.

10 15. The pneumatic tire of claim 1 wherein the syndiotactic polybutadiene has
a melting point of from 150°C to 220°C.

16. The pneumatic tire of claim 1 wherein the rubber in said component
contains from 10 to 250 phr of a filler.

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17. The pneumatic tire of claim 1 wherein said filler is silica.

18. The pneumatic tire of claim 1 wherein said filler is carbon black.

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